

AMENDMENTS

TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended): A method for compressing a Global Positioning System (GPS) signal, comprising:

receiving the GPS signal from a remote location via a wireless communications link;

removing a carrier component of the GPS signal;

matching a comb filter to the GPS signal to obtain a first output signal comprising filter lines; and

frequency shifting the filter lines in the first output signal to produce a compressed GPS signal by mixing the first output signal with a plurality of outputs from at least one frequency generator;

receiving an assist signal from a base station via a wireless communications link; and

removing telemetry data and Doppler from the GPS signal using the assist signal.

2. (previously presented): The method of claim 1, further including the step of filtering the compressed GPS signal through a bandpass filter to produce a second compressed GPS signal.

3. (previously presented): The method of claim 2, wherein the matching of the comb filter further includes:

receiving a frequency reference signal from a base station via a wireless communications link;

applying the frequency reference signal to the comb filter, wherein the frequency reference signal shifts the comb filter to an expected location of the filter lines of the first output signal.

4. (canceled).

5. (previously presented): A method for compressing a Global Positioning System (GPS) signal, comprising:

receiving the GPS signal from a remote location via a wireless communications link;

removing a carrier component of the GPS signal to produce a first resultant signal;

filtering the first resultant signal through a comb filter to produce a second resultant signal that includes a plurality of signals dispersed over a frequency spectrum;

generating a plurality of mixing signals at selected frequencies;

mixing the second resultant signal with the plurality of mixing signals to produce a first compressed GPS signal;

receiving an assist signal from a base station via a wireless communications link; and

removing telemetry data and Doppler from the first resultant signal using the assist signal.

6. (previously presented): The method of claim 5, further including filtering the first compressed GPS signal through a bandpass filter to produce a second compressed GPS signal.

7. (previously presented): The method of claim 6, further including:
receiving a frequency reference signal from a base station via a wireless communications link;

mixing the frequency reference signal and the first resultant signal to produce another first resultant signal; and

filtering the another first resultant signal through the comb filter to produce the second resultant signal.

8. (cancelled).

9. (previously presented): The method of claim 7, further including:
sending the second compressed GPS signal to the base station via a wireless communications link.

10. (previously presented): The method of claim 9, wherein the second compressed GPS signal includes a signal identifier.

11. (previously presented): The method of claim 10, wherein the signal identifier is a Mobile Identification Number/Electronic Serial Number ("MIN/ESN").

12. (canceled)

13. (canceled).

14. (canceled).

15. (canceled).

16. (canceled).

17. (canceled).

18. (canceled).

19. (canceled).

20. (canceled).

21. (cancelled).

22. (previously presented): The method of claim 9, further including:
receiving position information derived from the GPS signal from the base station.